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AUTHOR McDaniel, Michael A.
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ABSTRACT

This paper summarizes the results of a quantitative review of the validity of the employment interview. It begins by discussing factors that make the interpretation of interview validity data difficult. The interpretation of interview validity data is shown to be hampered by the heterogeneity of constructs and measurement methods in the interview. It is noted that summaries of interview validity data are further complicated by the heterogeneity of occupations providing interview data. Despite these problems, the quantitative review draws several conclusions from the cumulated literature and details areas where knowledge is lacking. Conclusions are categorized as things known about the employment interview, things probably known about the employment interview, and things not known about the employment interview. The report ends with speculation on prospects for gaining future knowledge concerning the validity of the employment interview. (Author/NB)

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Employment Interviews: Structure, Validity, and Unanswered Questions

Michael A. McDaniel

Defense Personnel Security Research and Education Center

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Abstract

This paper summarizes the results of a quantitative review of the validity of the employment interview. The interpretation of interview validity data is shown to be hampered by the heterogeneity of constructs and measurement methods in the interview. Summaries of interview validity data are further complicated by the heterogeneity of occupations providing interview data. Despite these problems, the quantitative review of the literature drew several conclusions from the cumulated literature and detailed areas where our knowledge is lacking.

Recent meta-analytic summaries of the value of the interview in personnel selection have better identified what is known and not known about the interview and the relationship between its structure and validity. Based on the results of one quantitative review of the interview literature (McDaniel et al., 1987), several statements can be made about the cumulative knowledge on the employment interview. This paper will begin by discussing factors that make the interpretation of interview validity data difficult. The paper will then draw several conclusions about the employment interview. This author has varying levels of confidence in these conclusions, and therefore they have been grouped into the following categories: "things known about the employment interview," "things probably known about the interview", and "things not known about the interview." A large amount of supporting data concerning these conclusions is available in McDaniel et al. (1987); interested readers should pursue that information. The paper will end with speculation on prospects for gaining future knowledge concerning the validity of the employment interview. All analyses in this paper are drawn from McDaniel et al. (1987). While the substantive findings of the present paper are drawn from the McDaniel et al. (1987) paper, some of the conclusions and speculations in the present paper go beyond that of the McDaniel et al. report.

Factors that hamper the interpretation of interview validity data.

There are three factors that make interview validity data more difficult to interpret than data collected using other measures such as cognitive ability tests. The first factor concerns the heterogeneity of constructs measured by employment interviews. The employment interview is a measurement method just as a paper and pencil testing format is a measurement method. When one conducts validity analyses of paper and pencil tests, the analyses are conducted separately for the different constructs measured by the tests (e.g., verbal, numeric). Separate analyses are performed because the construct distinctions are considered meaningful in their own right, and because different constructs may have different correlations with performance. Like paper and pencil tests, employment interviews may measure different constructs (e.g., cognitive ability, interpersonal skills, manifest motivation), however, little validity data for the employment interview, broken down by constructs, are available, and consequently separate analyses for different constructs are seldom possible. In brief, the validity of an employment interview can be a function of the constructs it measures and the relative weights of these constructs in the scoring process.

A second factor that confounds the interpretation of interview validity data is that interviews vary widely in their

measurement method. Although different paper and pencil measures of a given ability may vary slightly in the measurement process (e.g., they may use different item types), the measurement process across written tests for a given ability is very similar. In contrast, employment interviews vary widely in data collection processes. Some interviews follow a fixed set of interviewing guidelines prescribed by the interviewer's organization or authors of "how to interview" publications. Other interviewers have no predetermined agenda for the conduct of employment interviews. In addition to measurement variability due to the structure of the interview, interviewers vary in the extent to which they follow their own or their employers' interview guidelines. Thus, differences across interviews in both the interview agenda and the behavior of interviewers cause the employment interview to be heterogeneous in measurement method. Different measurement procedures are likely to produce varying levels of interview reliability and validity.

Since both the heterogeneity of interview content and interview measurement method can affect the magnitude of a given validity coefficient, the variability of a distribution of validity coefficients assembled for a meta-analytic study will be partially due to the interviews' heterogeneity of content and measurement method. A meta-analytic summary of interview validity data will also face validity variability due to the heterogeneity of the occupations under study. In most past

validity generalization studies of employment tests, the validity variance due to occupational differences has been controlled by analyzing each predictor separately for each occupation. Too few validity studies of the employment interview have been conducted to permit detailed analyses by occupation. Thus in a meta-analytic summary of employment interview validity data, the investigator has limited control over validity variance due to heterogeneity of constructs, measurement method, and occupational group.

In the McDaniel et al. (1987) meta-analysis of the validity of the employment interview, the researchers achieved partial control over the validity variance due to content by dividing the coefficients into two content groups: psychological and job-related. They acknowledged, however, that within these two content groups there remained considerable heterogeneity in the content of the interview. For example, some job-related interviews may stress job knowledge while others may stress interpersonal skills. In a similar manner, McDaniel et al. (1987) achieved partial control over the validity variance due to measurement method by assigning the coefficients to one of two method groups: structured and unstructured. However, within each measurement method group there remained substantial variability in measurement method. For example, some structured interviews may be more tightly organized than others. Finally, McDaniel et al. (1987) achieved partial control over validity variance due to

occupational effects by dividing the validity coefficients into two groups: police officer occupations and other occupations. The data did not permit a finer differentiation of the "other" occupations.

The uncontrolled sources of validity variance (heterogeneity of constructs measured, measurement process, and occupational group) affect the meta-analytic findings; specifically, they increase the apparent situational specificity and reduce the apparent extent of validity generalizability. Hence, conclusions based on such analyses tend to be conservative; they overestimate situational specificity and underestimate validity generalizability.

Things known about the employment interview

1. Structured interviews are more valid than unstructured interviews. For both job performance criteria (.50 vs. .40) and training performance criteria (.42 vs. .39), the results showed that structured interviews yield higher validities than unstructured interviews (see table 1).

2. Interviews are more valid for job performance criteria than for training criteria (see table 1). This is the opposite of what is found for measures of cognitive ability.

Things probably known about the interview

The McDaniel et al. (1987) analyses also suggested several conclusions that the present author considers "probably true" about the interview:

1. Interviews are more valid for some occupations than others. For predicting job performance, interviews show lower validity for police officers than for other occupations (see Table 2). This occupational difference is less pronounced for training criteria. This finding is similar to that obtained for cognitive measures for police occupations (Hirsh, Northrop, & Schmidt, 1986) and may have more to do with the police officer job performance criterion than with the employment interview.

A frequently made speculation regarding occupational variability in interview validity argues that interviews should be more valid for jobs demanding high interpersonal skills than for jobs where interpersonal skills are less job-related. The McDaniel et al. (1987) found a slight effect in the opposite direction with interviews being more valid for jobs with low interpersonal demands (observed r: high interpersonal demands = .21; low interpersonal demands = .24).

2. Validities for research criteria are larger than for administrative criteria (see Table 3). The interview generally showed its highest validity with criteria collected for research purposes, and less validity with criteria collected for administrative purposes. This was true for job-related

structured interviews (.64 vs. .43), and for unstructured job-related interviews (.42 vs. .40).

3. Structure and content are generally confounded in the employment interview. The more structured the employment interview, the more likely that the content of the interview is related to the job. For example, it is unlikely that one would develop a sophisticated structured interview in order to ask job applicants about their views on the chances of the Washington Red Skins winning the Super Bowl two years in a row.

4. There is substantial variability in the measurement method of what are termed "structured interviews" and this variability causes substantial variance in the validity of structured interviews.

5. Reported validities in the research literature probably overestimate the validity of the employment interview as typically conducted. To report a validity for an employment interview, the interview must be sufficiently structured to require the recording of scores. I suspect that most interviews are not so structured.

Things not known about the employment interview

The meta-analytic review of employment interviews by McDaniel et al. (1987) identified several areas concerning the employment interview where we know almost nothing:

1. The reliability of the employment interview is not known. Most reported validities of the employment interview are based on the inter-rater reliability of two or more interviewers where the applicant is interviewed only once. These reliabilities are termed conspect reliabilities (Cattell, 1971) and do not measure the intra-applicant response variability. The most appropriate reliability estimate would permit assessment of both inter-rater disagreement and intra-applicant variability. Very few reliability estimates of this type are available. Furthermore, since measurement method may influence the reliability of the interview, and some constructs measured by the interview may be more reliably measured than others, reliability data collected from one interview may not be representative of the reliability of other interviews that differ in measurement method and content.

2. Little is known about the range restriction in employment interviews. McDaniel et al. (1987) found very little range restriction data.

3. The construct validity of employment interviews is not known. Correlations between the interview and other predictors is seldom reported. In an earlier version of the McDaniel et al. (1987) paper, the authors reported on a small set of studies that indicated that the validity of the employment interview is not solely due to the extent to which the interview measures cognitive ability.

Prospects for future knowledge

Although the McDaniel et al. (1987) paper was a useful summary of the state of knowledge in the employment interview, I argue that relatively little additional knowledge about the validity of the employment interview can be gleaned from existing archival (published and unpublished) studies. Key information on structure and content is missing from almost all archival research studies on the employment interview. Too few studies have been conducted to permit substantive analysis of validity covariance with occupational groups or occupational attributes (e.g., interpersonal demands, cognitive demands). Since high quality primary research on the employment interview is needed to answer the unresolved questions about the employment interview, journal editors should be encouraged to publish primary validity studies on the employment interview.

For those who wish to conduct primary validity studies on the employment interview, several suggestions are offered. First, provide detailed information on the structure of the interview. The term "structure" is applied to very different interview formats. Sufficient information must be supplied so that analysts of secondary data are able to classify the interview within a taxonomy of structure. Second, provide a detailed narrative description of the content of the interview, and supplement the descriptions with correlations between the interview and other predictors (e.g., cognitive and temperament

marker tests). Third, organize the administration of the interview such that reliability estimates measure error variance due to both intra-applicant and inter-rater sources. Finally, report the range restriction data for the predictor.

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Table 1

Validity of Interviews as a Function of Structure

Criterion Type Interview Type	#r	Total N	Estimated Validity	Estimated SD
Job Performance				
Structured	34	5,964	.50	.27
Unstructured	24	2,595	.40	.11
Training Performance				
Structured	8	955	.42	.13
Unstructured	24	7,925	.39	.23

Note: Data from McDaniel et al.(1987). Reported validities are for interviews classified as job related. The estimated validity is the mean operational validity corrected for criterion unreliability and range restriction. The estimated SD is the estimated standard deviation of the operational validity distribution. The estimated SD is corrected for sampling error, and differences among studies in predictor reliability, criterion reliability, and range restriction.

Table 2

Validity of Interviews as a Function of Occupation

Occupation Type	#r	Total N	Estimated Validity	Estimated SD
Job Performance				
Police Occupations	12	1,316	.19	.15
Other Occupations	34	5,964	.50	.27
Training Performance				
Police Occupations	10	1,231	.27	.14
Other Occupations	8	955	.42	.13

Note: Data from McDaniel et al.(1987). Reported validities are for interviews classified as job related and structured. The estimated validity is the mean operational validity corrected for criterion unreliability and range restriction. The estimated SD is the estimated standard deviation of the operational validity distribution. The estimated SD is corrected for sampling error, and differences among studies in predictor reliability, criterion reliability, and range restriction.

Table 3

Validity of Interview as a Function of Criterion Purpose

Interview Type	#r	Total N	Estimated Validity	Estimated SD
Job-Related Structured				
Research Criteria	21	1,751	.64	.32
Administrative Criteria	13	4,213	.43	.22
Job-Related Unstructured				
Research Criteria	8	463	.42	.00
Administrative Criteria	16	2,132	.40	.12

Note: Data from McDaniel et al.(1987). Reported validities are for interviews classified as job related. The estimated validity is the mean operational validity corrected for criterion unreliability and range restriction. The estimated SD is the estimated standard deviation of the operational validity distribution. The estimated SD is corrected for sampling error, and differences among studies in predictor reliability, criterion reliability, and range restriction.